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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,791	01/13/2004	Bradley Q. Niemann	713102.162	1790

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EXAMINER

PATEL, MITAL B

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/707,791	Applicant(s) NIEMANN, BRADLEY	
	Examiner Mital B. Patel	Art Unit 3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-11,14 and 15 is/are rejected.
- 7) ☒ Claim(s) 7,8,12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/13/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-6, 9, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Werjefelt (US 4,683,880) in view of Baker et al (US 5,697,106).

4. **As to claim 1**, Werjefelt teaches a neck seal **28** for use in an emergency breathing apparatus having an interior and an exterior; the neck seal comprising an annular sheet of elastomeric material (**See Col. 6, lines 1-6**) having a substantially central aperture **29** for donning over a person's head, the substantially central aperture being sized appropriately for snug fitting around the person's neck so as to be sufficiently tight to prevent passage between the person's neck and the neck seal of fluid materials without choking the person. It should be noted that Werjefelt teaches essentially all of the limitations except for wherein the neck seal is coated at least in part

with parylene, to thereby prevent passage through the elastomeric material of NBC/CBR materials. Baker et al teaches in a neckable article the use of parylene (**See Col. 5, lines 41-44**) to provide an impervious layer or barrier to the neckable article to prevent transmission of biological contaminants. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a parylene coating in the neck seal of Werjefelt to provide an impervious layer or barrier to the neckable article to prevent transmission of biological contaminants.

5. **As to claim 2**, Werjefelt teaches a neck seal, wherein the elastomeric material of the neck seal is at least in part silicone (**See Col. 6, lines 1-6**).

6. **As to claim 3**, the above combination teaches a neck seal, wherein the neck seal has a first side and a second side and is substantially entirely coated with parylene on at least one of the first side and the second side.

7. **As to claim 4**, the above combination teaches a neck seal, wherein the first side is disposed facing the interior of the emergency breathing apparatus and is substantially entirely coated with parylene.

8. **As to claim 5**, the above combination teaches a neck seal, wherein the second side is disposed facing the exterior of the emergency breathing apparatus and is substantially entirely coated with parylene.

9. **As to claim 6**, the above combination teaches a neck seal, wherein both the first side and the second side of the neck seal are substantially entirely coated with parylene.

10. **As to claim 9**, Werjefelt teaches an improved protective breathing apparatus having a hood **10** for fitting over the user's head and a neck seal **28** connected at the base of the hood; the neck seal being formed of elastomeric material (**See Col. 6, lines 1-6**) having an opening **29** for a passage therethrough of a user's head upon stretching of the neck seal. It should be noted that Werjefelt teaches essentially all of the limitations except for wherein the neck seal is coated at least in part with parylene, to thereby prevent passage through the elastomeric material of NBC/CBR materials. Baker et al teaches in a neckable article the use of parylene (**See Col. 5, lines 41-44**) to provide an impervious layer or barrier to the neckable article to prevent transmission of biological contaminants. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a parylene coating in the neck seal of Werjefelt to provide an impervious layer or barrier to the neckable article to prevent transmission of biological contaminants.

11. **As to claim 10**, Werjefelt teaches a protective breathing apparatus, wherein the elastomeric material of the neck seal is at least in part silicone (**See Col. 6, lines 1-6**).

12. **As to claim 11**, Werjefelt teaches a protective breathing apparatus wherein the breathing apparatus has a face shield including a transparent area **24** for viewing therethrough.

13. Claims 9, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dosch et al (US 5,113,854) in view of Baker et al (US 5,697,106).

14. **As to claim 9**, Dosch et al teaches an improved protective breathing apparatus having a hood **12** for fitting over the user's head and a neck seal **14** connected at the

base of the hood; the neck seal being formed of elastomeric material (**See Col. 3, lines 26-27**) having an opening **34** for a passage therethrough of a user's head upon stretching of the neck seal. It should be noted that Dosch et al teaches essentially all of the limitations except for wherein the neck seal is coated at least in part with parylene, to thereby prevent passage through the elastomeric material of NBC/CBR materials. Baker et al teaches in a neckable article the use of parylene (**See Col. 5, lines 41-44**) to provide an impervious layer or barrier to the neckable article to prevent transmission of biological contaminants. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a parylene coating in the neck seal of Dosch et al to provide an impervious layer or barrier to the neckable article to prevent transmission of biological contaminants.

15. **As to claim 14**, Dosch et al teaches a protective breathing apparatus further comprising a scrubber device **20** attached to an internal surface of the hood portion of the breathing apparatus substantially adjacent to the neck seal.

16. **As to claim 15**, Dosch et al teaches an improved emergency personal oxygen system comprising a fire-resistant fabric pouch **58** for containing a vacuum sealable pouch **18** and a protective breathing apparatus; a vacuum sealable pouch for containing a protective breathing apparatus and a protective breathing apparatus including a hood **12** portion and a neck seal **14** having two opposed surfaces connected to the hood portion and an transportable oxygen source in fluid contact with the interior of the breathing apparatus. It should be noted that Dosch et al teaches essentially all of the limitations except for wherein the neck seal is coated at least in part with parylene, to

thereby prevent passage through the elastomeric material of NBC/CBR materials.

Baker et al teaches in a neckable article the use of parylene (**See Col. 5, lines 41-44**) to provide an impervious layer or barrier to the neckable article to prevent transmission of biological contaminants. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a parylene coating in the neck seal of Dosch et al to provide an impervious layer or barrier to the neckable article to prevent transmission of biological contaminants.

Allowable Subject Matter

17. Claims 7, 8, 12, and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. The following is a statement of reasons for the indication of allowable subject matter: As to claims 7 and 12, the prior art of record does not teach nor render obvious the overall claimed combination of a protective breathing apparatus wherein the parylene coating on the neck seal is about 1.0 to 2.0 microns thick.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6340024, US 5705251, US 5680653, US 5226409, US 5165394, US 5040530, US 5056512, US 4627431, and US 3789839.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mital B. Patel whose telephone number is 703-306-5444. The examiner can normally be reached on Monday-Friday (8:00 - 4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on 703-308-0101. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mital B. Patel
Examiner
Art Unit 3743

mbp

Henry Bennett
Supervisor Patent Examiner
Group 3700